

REMARKS

Claim status

Claims 1-25 were pending in the case at the time of the current Office Action. Claims 1-6, 8, and 14-18 are currently amended herein. Claims 7, 9-13, and 19-25 are cancelled herein. New claims 26-32 have been added herein. No new matter has been added. Claims 1-6, 8, 14-18, and 26-32 are currently pending in the application. There are a total of 19 claims currently pending in the application.

Previously Submitted IDS's Not Considered

Applicants see no evidence that the IDS's previously submitted on January 15, 2002 and May 20, 2002 were considered by the Examiner. Applicants respectively request that the Examiner provide evidence that these IDS's were considered.

Specification Amendments

The specification has been amended herein simply to add the appropriate headers at the beginning of the document.

Section 112 rejections

In the current Office action, claims 3-13 and 16-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

In the current Office action, the Examiner states that, "Claim 3 is verbose and difficult to understand what applicant is trying to accomplish. Claim 4 as well. It is unclear the relationship to the signal during the blanking period since signal are not detected during the blanking periods."

Claims 3-6, 8, and 16-18 have been amended herein to take care of the 35 U.S.C. 112, second paragraph rejections. Claims 9-13 and 19-25 have been cancelled. Note that a blanking level is determined during the blanking period. This blanking level establishes a “zero reference” for subsequent measurements of various signal features as described in the specification.

It is respectfully submitted that the 35 U.S.C. 112 rejections have been overcome and that the rejections should be removed.

Section 102 rejections

In the current Office action, claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Levine (USPN 5,350,401).

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

Independent claim 1 recites a stimulation arrangement, comprising:
a stimulation unit to deliver electrical stimulation pulses for stimulating body tissue; and
an evaluation unit to receive at least one electrical signal in conjunction with the delivery of a stimulation pulse and to evaluate said received electrical signal for checking stimulation success, and wherein the evaluation unit detects signal features in the received electrical signal that characterize a case of lack of stimulation success, and delivers a corresponding output signal.

Dependent claim 2 recites the stimulation arrangement of claim 1, wherein the evaluation unit associates the received electrical signal with a stimulation pulse in respect of time and detects a feature of a polarization artifact as a signal feature in the received electrical signal.

It is respectfully submitted that Levine (USPN 5,350,401), hereinafter Levine, does not teach or suggest the claimed invention. In particular, Levine does teach or suggest specifically detecting signal features that indicate a lack of stimulation success. Also, Levine does not teach or suggest detecting a feature of a polarization artifact as does the invention of claim 2. Instead, Levine is directed to providing stimulation pulses to a patient's heart whenever cardiac activity is not sensed within a prescribed escape interval (column 5, lines 1-4). Levine describes looking for a sensed R-wave during a time interval and only determines a condition of lack of stimulation

success if this time interval times out before detection of the R-wave (column 13, lines 41-48), and generates a subsequent shocking pulse. The claimed invention can directly detect stimulation failure in the received electrical signal by detecting signal features that characterize a lack of stimulation success. Levine is directed towards what to do when a signal (i.e., an R-wave) is not detected.

Therefore, in view of at least the foregoing, it is respectfully submitted that claim 1 is neither anticipated nor rendered obvious, and it is respectfully submitted that claim 1 now defines allowable subject matter. Also, since claims 2 depends directly from claim 1, it is respectfully submitted that claim 2 defines allowable subject matter as well. Applicants respectfully request that the rejections of claims 102 under 35 U.S.C. 102(b) be removed.

Section 103 rejections

In the current Office action, claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levine.

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

As described previously, Levine does not teach or suggest the invention of independent claim 1 and it was submitted that claim 1 defines allowable subject matter. Therefore, detecting a negative voltage in combination with claim 1 does not teach or suggest the invention of claims 14 and 15 which are dependent, either directly or indirectly, on claim 1. Since claims 14-15 are dependent, either directly or indirectly, from claim 1, it is respectfully submitted that claims 14-15 define allowable subject matter as well. Applicants respectfully request that the rejection of claims 14-15 under 35 U.S.C. 103(a) be removed.

Accordingly, the applicant respectfully requests reconsideration of the rejections based on the arguments made above. After such reconsideration, it is urged that allowance of all claims will be in order.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'David J. Muzilla', with a stylized flourish at the end.

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